



McCarthy Road Audio Tour Script

Sources: National Park Service resources including the Wrangell-St. Elias National Park & Preserve website (www.nps.gov/wrst), the McCarthy Road Guide, NPS brochures & newspaper, park staff. Central Alaska Network (<http://science.nature.nps.gov/im/units/cakn/WRST.cfm>). AK Dept. of Fish & Game Wildlife Notebooks (www.adfg.state.ak.us/pubs/notebook/notehome.php). The Milepost, 2001 Edition. McCarthy Road Scenic Corridor Plan, State of Alaska, 1997. Various Wikipedia sites.

The mission of Wrangell-St. Elias National Park and Preserve: We conserve the ecological integrity and heritage resources of Wrangell-St. Elias National Park and Preserve while providing for public use in a wilderness setting. We serve visitors who seek inspiration, recreation, and education and we strive to provide for a quality and safe experience. We value those who live within the park boundaries and those who come to engage in traditional activities, subsistence or scientific study. We cooperate with local communities, landowners, Alaska Native groups and others who are part of Wrangell-St. Elias National Park and Preserve, in order to address their needs while fulfilling our responsibility to protect natural and cultural resources.

McCarthy Road Basics:

- The 59 mile, narrow, one-lane road is gravel, winding, and depending on conditions can be rough at times.
- It may take two to three hours to travel the road, each way or longer if you make more stops.
- Please drive the 35 mph speed limit, or most likely slower for blind curves, narrow sections, and rough patches. Use caution.
- This is a remote area with limited services. There is no fuel available along the McCarthy Road at this time. At the road's end, fuel *may* be sold seasonally with limited hours. You should fill your tank with fuel in Chitina, Glennallen, or Kenny Lake.
- Carry a full-sized spare tire and an adequate jack. Seasonal tire repair services are found in McCarthy and Chitina, look for signs.
- Cell phone service varies according to your phone carrier, but is generally good, with some dead zones. Some carriers don't work at all. Public phones are available for local calls at the end of the road in McCarthy.
- Private land adjoins many parts of the road. Please respect private property.

Track Names:

1. Chitina Rest Area to The Copper River
2. Chitina River Scenic Vista
3. Strelna, Silver, and Sculpin Lakes
4. Kuskulana Bridge
5. Open Wetlands
6. Gilahina Trestle
7. Crystalline Hills
8. Lakina River
9. Long Lake
10. End of the Road

Track 1: Chitina wayside to the Copper River area

(Music starts and fades out)

Welcome to Wrangell-St. Elias National Park & Preserve, America's largest national park! We hope you're excited to embark upon this once in a lifetime journey. The rough and challenging McCarthy Road winds through the park and into the heart of this rugged Alaskan terrain. Remoteness requires a little planning, so we hope you have all the essentials: extra food & water, a road guide & map, a park newspaper, binoculars, proper outdoor gear & clothing, a spare tire & adequate jack, and a strong sense of adventure! The McCarthy Road provides for breathtaking mountain vistas, the chance to see wildlife and an opportunity to explore the vast landscape. You can also learn the surprising tale of a railway built solely to serve the bustling Kennecott Copper Mines.

The McCarthy Road stretches for 59 scenic miles from the famous Copper River to the historic towns of McCarthy and Kennecott. The roadway originated as a railway, completed in 1911, to transport copper ore from the remote Kennecott Copper Mines to a coastal port for shipping. When large scale operations ended in 1938, most of the rails were salvaged for scrap iron, but were subsequently lost to a tsunami following the 1964 Good Friday Earthquake. The remaining rails were pushed aside along the road. In 1971 a new bridge was constructed over the Copper River, the first large river you cross just one mile west of the town of Chitina. The rail bed was then covered with gravel, creating what we now call the McCarthy Road. Narrow and winding, the road still reflects its railway origins. In places, remnants of railroad ties may come to the surface along with the occasional spike, creating unexpected hazards. Although traffic and weather often result in ruts and bumpy surfaces, under normal summer conditions most passenger vehicles can make the trip. Please allow faster vehicles to pass, by pulling over and using turnouts. Due to the narrow road and limited visibility, we suggest extreme caution for large RV's on the McCarthy Road. Remember the speed limit is 35 mph and most times you'll need to go slower due to changing and hazardous conditions. Also, the McCarthy Road can have soft shoulders and may be slick in rainy conditions, so travel with care. In dry conditions, the road can be extremely dusty. If you're passing on-coming traffic, slow down so that both vehicles are able to see the edge of the road as you're passing. Increase your following distance to stay safe in these dusty conditions. This will make for a more enjoyable ride for all travelers on the road. Driving the entire length of the McCarthy Road can take about 2 to 3 hours one-way.

Some other important facts to note about this road: At several points along the way, you'll notice signs showing private land interspersed among the national park and national preserve lands, so please respect private property. Cell phone coverage varies by carrier, but is generally good with some dead zones. Other carriers may have no coverage at all. There are several waysides and rest areas located along the road, with vault toilets and picnic tables, but no running water. Last, but not least, there are no fuel stations along the McCarthy Road, but fuel may be seasonally available in McCarthy, at the end of the road. Tire repair service may be seasonally available in McCarthy and Chitina. There are no other services along the road, so please plan accordingly.

While listening to this audio tour, you can follow along with the McCarthy Road Guide in the park newspaper. Take note of your location on the map. Watch for the mile markers along the road; they are white wooden posts with green numbering. Having the Road Guide and watching for the mile markers will help you recognize when to start the tracks of this audiotour. They begin in the town of Chitina, just after the Rest Area.

This is a journey meant to be soaked in and taken slowly. Enjoy the views around you. Take time to capture photos along the way. Take time to get out of your vehicle, stretch, and breathe it all in. Don't get too caught up in getting there, enjoy the road ahead.

(Music fades in and out)

By now you've probably passed through the town of Chitina, it was the tiny town just before the start of the McCarthy Road. You may have stopped at the historic Chitina Ranger Station to gather information for your trip. The Ranger Station is one block off the main road on the left side of the road. During the summer this ranger station can be busy; the area is a popular fishing destination and serves as a location to gather the most current information on road conditions. The town of Chitina, including the building that now houses the ranger station, sprang up in 1910 as the Copper River & Northwestern Railway was being developed. It was a major stop-over for miners and travelers to obtain goods and supplies as they traveled back and forth 196 miles from the coastal town of Cordova to the mountainous Kennecott Copper Mine and town of McCarthy. Some travelers used this stop to get off and travel further into the interior of Alaska to seek a new life and try their luck at gold mining. The original plan of the Copper River and Northwestern railway was to traverse in that same direction, towards Fairbanks, and therefore open up the Alaskan interior to easier transportation and exploration. The railway towards Kennecott was planned as only a smaller spur to the larger railway expanding into the Alaskan interior, an "All-America" route. This was not to be. A long history of political decisions made the building of the railway and the "All-America" route into the interior impossible.

The McCarthy Road officially begins when you drive through a narrow rock gap, referred to locally as the "railroad cut." The cut was originally a railroad tunnel, which was later blasted open due to falling rock. Ahead of you lies the confluence of the Chitina and Copper Rivers. The Copper River makes up the western boundary of Wrangell-St. Elias National Park & Preserve, as it flows almost 300 miles from its origins near the Copper Glacier in the northern area of the park to the Gulf of Alaska. You may see Alaska residents fishing from boats or on land using dipnets or fishwheels to catch world renowned "Copper River Reds" or Sockeye salmon.

(Sounds: Water running, fishing activities? Fishwheel sounds – could be like a water wheel/mill?)

As you cross the bridge that spans the Copper River, upstream you should see the 12,010 foot tall Mount Drum looming to the north, as well as the Kotsina River delta feeding into the Copper River. After the bridge, also on the north side of the road, is an easement. An easement is an area of land where visitors are granted the right to cross private property. Visitors are allowed to access the Copper River in this spot, to park a vehicle, load & unload rafts, and camp for up to 24 hours. Please look for the easement markers and respect the landowners who allow the easement to exist by staying within the boundary. This is an excellent place to observe Alaskans catching salmon or to snap a picture of the Copper River with Mount Drum in the distance. Here in Alaska our braided riverbeds can change quickly and become dangerous, so please be careful when driving near the water.

On the south side of the road, after crossing the bridge, you'll find a privately-run, primitive campground. This popular camping area has about 12 campsites, picnic tables, fire pits, and vault toilets.

Take your time when traveling the road. Take note of all the features around you: the mountains, rivers, trees, and wildlife. Think of the travelers who have come and gone down this exact path; of the distance that the glacially-fed Copper River has traversed; of the excitement that new visitors must have felt coming in to this area. Think about the journey *you're* about to embark on, down the McCarthy Road, into the heart of Wrangell-St. Elias National Park & Preserve!

(Music fades in and out)

This concludes Track 1. At this time, go ahead and pause or stop this recording. Proceed to Track 2 when you reach mile 5, at a turnout to the south or right side of the road, with a scenic vista of the Chitina River.

Track 2: Chitina River scenic vista area

(Music starts and fades out)

There are several small pullouts which offer nice views of the Chitina River and the Chugach Mountains to the south. This is a great place to get photos and enjoy the fresh air that tends to blow through this river valley. Sometimes the river's fine silt will cloud the valley below from the strong winds. The Chitina River is a braided river which is characterized by many dividing and reuniting channels, as well as numerous islands and gravel bars. The park's braided rivers run heavy with sediment because much of the drainage basin is fed by glaciers. Glaciers slowly scour the underlying substrate they rest on, creating fine silt, sand, and gravel which gets carried downstream by the glacial melt waters. Because many of the park's rivers are glacial, high water typically occurs during summer hot spells rather than with springtime snowmelt you may have experienced in other mountain ranges in the Lower 48. Low water usually occurs in late winter when nearly everything is frozen. Just downstream, the Chitina River meets up with the Copper River and travels many miles on its way to the Gulf of Alaska. The Copper River and its tributaries, including the Chitina River, drain an area of approximately 24,000 square miles! That's almost the size of the state of West Virginia!

The path of the Copper River & Northwestern Railway followed these rivers as it reached into interior Alaska. Skeptics nicknamed the railway the "Can't Run & Never Will," a play on the initials of the real name for the railroad. They thought human engineering would never overcome this vast, rugged and wild landscape, but the railway's builders overcame those incredible challenges in completing construction and maintaining operations. Preparations and surveying for the route began in 1905, construction began in 1907, and was completed in 1911.

(Sounds: workers hammering, people, construction sounds)

Six thousand workers encountered many hardships & struggles within the Alaskan wilderness as they toiled on the tracks. They laid rails over the vast Copper River delta, across the face of

two active glaciers, *over* a glacier, up massive cliffs and canyons, through and over raging rivers, and past deep snow and avalanche prone areas. The men battled extreme cold and unforgiving swarms of mosquitoes. In Kennecott, a final ceremonial copper spike was driven on March 29th, 1911 marking the completion of the 196 mile railway. Now the owners of the Kennecott Copper Corporation had the most important part of their mining operation in place—the ability to transport the copper ore to market. Ore was shipped by rail to the waiting steam ships in the port of Cordova, and then floated south to a smelter in Tacoma, Washington. The first copper train to travel on the Copper River & Northwestern Railway carried an astonishing \$250,000 worth of high grade copper on 35 ore-cars. Much more ore, valued at millions of dollars, would travel this route over the next 27 years.

(Sounds: Train whistle, train moving along)

The building of the railway was extremely challenging, but so was the continual maintenance and upkeep required of the railroad staff each year. Raging, changing rivers were always a challenge. Winters brought harsh conditions with avalanches and feet upon feet of snow. Workers attached rotary snowplows to the front of the train to clear the way. Sometimes the trains, supplies, ore, and men would be stuck for days or even weeks at a time when the snow was too much for even the plows. Workers would have to shovel out or wait it out. Sometimes engineers simply chose to shut down rail operations for the winter and bags of copper ore were stacked and stored, awaiting the spring thaw. Another unique challenge for workers was the maintenance of the Copper River bridge crossing. Today you drove across a modern steel and concrete bridge. During the copper mining era a wooden trestle carried railcars across the river. Men drove the wooden pilings into the riverbed to support the wooden bridge across the Copper River. Annually, this bridge was threatened by springtime ice melt and breakup. Ice jams quickly traveling downstream could and often would tear out the entire bridge. Engineers eventually decided to remove the rails each year, just before the spring breakup, allowing the water and ice to take the remaining wooden timbers downstream. After the spring breakup, crews would rebuild any missing wooden pilings and trestle, and re place the rails. This is another example of the struggles men dealt with while maintaining the railway in harsh Alaskan conditions. But without this integral railway, the mighty Kennecott Copper Corporation could never have existed.

(Music starts and fades out)

This concludes Track 2, go ahead and pause or stop this recording. Proceed to Track 3 when you reach mile 10, near Strelna, Silver, and Sculpin Lakes.

Track 3: Strelna Lake, Silver Lake, and Sculpin Lake area

(Music starts and fades out)

Are you interested in dropping a line and wrangling some fish in the Wrangells? Did you remember to bring your State of Alaska fishing license? Once you reach mile 10 you will pass several lakes that are stocked by the Alaska Department of Fish and Game and accessible to the public. In Silver and Sculpin Lakes you can find rainbow trout and there are Silver Salmon in Strelna Lake. There are public parking areas and the walk in to the lakes is less than one mile. These are also great places to kayak or canoe the remote and relaxing lakes. Don't forget to respect private property and stick to the marked public access areas.

(Sounds: Canoeing, kayaking, fishing reel)

In Wrangell-St. Elias the lakes, rivers, plants, animals, mountains, and glacially carved valleys lie within the boreal forest ecosystem. The boreal forest is a northern forest biome. A biome is a large naturally occurring community of flora and fauna within a major habitat. This forest covers 28% of Canada and the United States, but can also be found in northern Europe and northern Asia, occupying more land than any other forest type in the world. Globally, the boreal forest, sometimes also called taiga, usually consists of pine, spruce, and/or larch trees. Here in Wrangell-St. Elias, our particular variety of boreal forest is dominated by black and white spruce, quaking aspen, paper birch, and balsam poplar. Common shrubs include willow, alder, cranberry, rose and blueberry. You might grab a plant identification book and seek out some of these interesting plants as you make your journey down the McCarthy Road!

In these forests, the trees sometimes grow densely, and other times they stand solitary in wide open meadows, muskeg, or tundra. This is a function of the brutally cold climate found here in the winter. The boreal forest is named after *boreas* the Greek god of the north wind. This north wind and northern latitude brings frigid winter temperatures, as low as -50F! The cold temperatures, short summers, discontinuous permafrost, and forest fires all play a part in managing the diversity of Alaska's boreal forest.

Music

As you travel down the McCarthy Road to mile 14.5, you'll find the road that leads to the Kotsina Trail and other backcountry routes. If you're feeling up for a longer, overnight backpacking adventure, this road leads 2.5 miles to the Nugget Creek trailhead or 3.8 miles to the Dixie Pass trailhead. These three trails lead *much* farther into the rugged Wrangell Mountains, where scenic vistas abound. Near the end of the Nugget Creek trail, a very rustic public-use cabin may be available for overnight stays. There are many important things to consider if you plan to stay in the Nugget Creek public-use cabin, so *please* contact a park ranger for more information. Please respect private property that is interspersed along this trail. The initial section of the Kotsina trail is a gravel road, but is not maintained and may not be passable in low clearance vehicles. It's a good idea to park your car on the side of the McCarthy Road and simply hike to the trailheads. If you're not feeling up to it today, maybe try it out in the future! Ask a park ranger about details and route descriptions.

(Music starts and fades out)

This concludes Track 3, go ahead and pause or stop this recording. Proceed to Track 4 when you reach mile 17, at the Kuskulana Bridge area.

Track 4: Kuskulana Bridge area

(Music starts and fades out)

There are several pullouts on the south side of the road that provide excellent views of an amazing feat of engineering—the Kuskulana Bridge. This cantilever-styled bridge spans 525 feet across and is perched 238 feet above the Kuskulana River gorge. There's a wayside and rest area on the far side of the bridge. This is a one-lane bridge, so watch for oncoming traffic or pedestrians.

(Sounds: Winter wind blowing, metal construction sounds)

The Kuskulana Bridge was constructed as part of the Copper River & Northwestern railway, moving passengers, supplies, and copper ore to and from the Kennecott Copper Mines. Amazingly, construction of this bridge, during a bitter winter, took only two months to complete! The pressure was on to complete the railway by the spring of 1911 because copper prices were high and bags of copper ore were filled and waiting on the loading docks in Kennecott. This bridge project would prove to be one of the greatest challenges of this improbable northern railway. Beginning in 1910, the workers braved temperatures as low as -54 degrees Fahrenheit! In Lone Jansen's book *The Copper Spike*, she states "the men, working in this cruel weather, were so bundled up they were described as looking like so many wooly bears on a bridge." Just imagine trying to work in those conditions!

Crews constructed the steel bridge in three pieces, two spans reaching from each side of the canyon and one center span. This strategy meant supplies were needed on both sides of the river and construction needed to take place simultaneously from each end. With true Alaskan spirit and tenacity, the men bundled up and toiled above the canyon through long, cold hours of darkness, with their work lit by the glow of acetylene lights. The center 225-foot-span was bolted into place as the thermometer hovered at -40 degrees! With the completion of the Kuskulana Bridge on New Year's Day 1911, they only had 49 more miles of rails to lay to reach Kennecott!

Four months later, the railway was completed to Kennecott and serviced the area for over 27 years. In 1938 the Kennecott Copper Corporation closed the mines due to low copper prices and the fact that the copper ore was all but gone from these mountains. Subsequently the Copper River & Northwestern Railway was also shut down. When the railway was converted to a road in the 1960's, the single-lane Kuskulana Bridge was the only structure on the McCarthy Road originally built as a railway bridge to be kept in service as a vehicle bridge. However it was left without guard rails for many years! Can you imagine driving across this bridge with that steep 238 foot drop below you? This state managed road continues to grow and improve, with the maintenance efforts of the Alaska Department of Transportation. Road repairs, maintenance, grading, and improvements can be sporadic, and conditions depend greatly on the weather and traffic flow. Take it slow and watch for potholes and bumpy conditions.

This might be a good time to get out and take a break. Take a walk on the bridge, stretch your legs, snap a few photos, and enjoy the fresh air. Be mindful of approaching vehicles. If you're up for a challenge, there is a catwalk that runs below the bridge. It doesn't have an easy approach, so you'll need some creativity or take a friend to help you reach it. It spans across the Kuskulana River and provides great views of the construction of the bridge. The wayside on the south side of the road has an interpretive kiosk, a vault toilet, and a trash bin for your convenience.

(Music fades in and ends)

This concludes Track 4. At this time, go ahead and pause or stop this recording. Proceed to Track 5 when you reach Mile 20, where there's an open meadow and wetland.

Track 5: Open Grass Wetland

(Music starts and fades out)

(Sounds: Dragonfly, bog sounds, frogs, splashing birds, etc)

Watch for dragonflies as you approach an open meadow wetland with a great view of the Chugach Mountain range to the south, or on the right side of the road. There are three types of wetlands you might see along the McCarthy Road: grass, sedge, and bog wetlands.

In the grass wetland you see near mile 20, the species composition is mostly, as you might expect, water tolerant grasses. The grasses may grow in clumps or tussocks. Some woody plants can also live in the grass wetland, depending on the amount of water fluctuation. You might see a moose nearby eating willows or river otters crossing the road in search of a meal.

You'll also see some sedge wetlands on your journey today. These wetlands are comprised of mostly sedges, which are like grasses, but with triangular stems. An easy way to remember the distinction is the phrase: "sedges have edges." A sedge wetland looks very much like a large pond. It can host a large variety of plant life, waterfowl, and other wildlife. These wetlands are home to water lilies, beavers, and trumpeter swans. Stay alert and you might see a beaver gathering sticks for its lodge. Trumpeter swans are sometimes seen feeding with their heads under the water. Their heads and necks are often stained brownish from the iron-rich wetland soils. Other bird species include various Ducks, Grebes, Mergansers, and Goldeneyes.

(Sounds: Birds chirping or calling-Ducks, mergansers, or goldeneyes)

Bog wetlands are comprised of several feet of peat deposits, acidic waters, and an overlying vegetative layer of thick sphagnum moss. Bogs require a persistently wet and cool climate in order to allow the growth of peat-forming sphagnum moss. It may look like you can travel across a bog in places, but they are actually heavily saturated with water and both legs and wheels will sink. If you're a birder, keep an eye out for the Olive-sided Flycatcher, Lesser Yellowlegs, Wilson's Snipe, Yellow-rumped warbler, Swainson's Thrush, or Solitary Sandpiper hanging out in the bogs.

(Music)

Alaska's wetlands occupy about 43% of the state's surface area. That means Alaskan wetlands hold more territory than the state of Texas! These wetland ecosystems often follow the edges of various other ecosystems, which results in a diverse array of plant and animal species. In Wrangell-St. Elias you'll find wetlands teeming with wildlife at almost every turn.

(Music fades in and ends)

This concludes Track 5. At this time, go ahead and pause or stop this recording. Proceed to Track 6 when you reach Mile 29 or the Gilahina Trestle Wayside.

Track 6: Gilahina trestle area

(Music starts and fades out)

As you come down the hill, you'll see the gorgeous Gilahina trestle, a wooden railroad structure named for the river it crosses. This trestle is yet another remnant of the copper mining days and the Copper River and Northwestern Railway. The rest area on the right has an interpretive kiosk, a vault toilet, and a trash bin for your convenience. If you haven't stopped yet on your journey, this is an excellent place to get out, stretch your legs, explore, and learn a bit more

about the history of the area. If you're out on a stroll looking at the trestle, stay still and listen to the birds and the flowing Gilahina River as it runs downstream. Look for wildlife, search for wildflowers, but please stay off the unstable trestle.

(Sounds: General outdoor sounds, birds, rustling in the bushes, etc.)

Wooden trestles were commonly used along the Railway corridor to span gaps and canyons in the rugged Alaskan terrain. A total of 273 wooden trestles were constructed as part of the Copper River and Northwestern Railway. That means trestles spanned more than 30 miles or about 15% of the 196-mile railway. Of these trestles, the Gilahina was the largest: originally 890 feet long, 90 feet high, and consisting of ½ million board feet of lumber! Of the numerous struggles in the construction of this trestle in the winter of 1911, the weather turned out to be the greatest challenge for workers to overcome. During January of that year, the thermometer sank to a bone-chilling -67 degrees Fahrenheit! A temperature equivalent to the average surface temperatures on Mars! Despite the harsh conditions, the workers persevered and pushed to complete the construction in just 8 days! Amazing! Here's how a railroad official described the feat:

(Different voice style- Male)

"Call it what you will, the work is nothing short of marvelous, when weather conditions are taken into consideration. For the past two weeks the thermometer has been ranging between 30 and 60 below and at times during the extremely cold hours, trouble was experienced by the carpenters in driving the bolts, which split the heavy timbers like a cake of ice."

Even with such difficulties, and the exorbitant cost of construction and maintenance, the Kennecott Copper Corporation was able to generate enough profit from the processing of the copper ore in the early 1900's to make it all worthwhile. The extremely high grade copper ore, upwards of 70% copper, was very lucrative. Ultimately, the Kennecott Copper Corporation realized earnings of 100 million dollars! That's more than 1.6 billion in today's dollars! Despite the Kennecott Mines shutting down in 1938, the corporation lived on through a series of mergers and purchases of mining operations worldwide. In 1989, the Kennecott Corporation was purchased by Rio Tinto global mining company, which still exists today as Kennecott Utah Copper. They continue to mine Utah's Bingham open-pit copper mine, the largest man-made excavation in the world. It's incredible to think that this risky, turn of the century enterprise in the wilds of Alaska, would be the start of the great Kennecott Copper Corporation, and eventually an integral part of a global mining empire.

(Music fades in and ends)

This concludes Track 6. At this time, go ahead and pause or stop this recording. Proceed to Track 7 when you reach mile 34 or near the Crystalline Hills area.

Track 7: Crystalline Hills area

(Music starts and fades out)

If you're looking for a place to leave the road behind and stretch your legs, the Crystalline Hills area has a leisurely hike along a loop trail. The trail provides an intimate experience with a spruce forest. Several spur trails lead to panoramic views of the Chitina River Valley, Moose Lake and the Chugach Mountains to the south. You can go as far as you like and turn back at

any time. In June and July, take bug spray to keep mosquitoes at bay! And don't forget your camera!

(*Music*)

Have you seen any wildlife along the road? Approaching the Crystalline Hills you'll see mountains & cliffs on the north or left hand side of the road. This is an excellent place to look for wildlife. Sometimes it can be hard to spot wildlife in Wrangell-St. Elias due to the vast wilderness and dense vegetation. If you take it slow and learn a few tricks, perhaps you'll be lucky on your journey today.

One tip is to use a pair of binoculars to search the hillsides. The Crystalline Hills area is a great place to scan for Dall sheep on the high mountainsides and open rocky ridges. Take a few minutes to get out of your vehicle, and look along the hills for white spots that look like snow. If the snow moves, it may be a Dall sheep! So what's the difference between a Dall sheep and a Mountain Goat? Both are white and live in similar habitats, but the sheep are marked by curled horns that wrap around their ears, while mountain goats have short, straight spiky horns. A sheep's coat is also a bit shorter, when compared to the shaggy, long white hair of the Mountain Goat. Want to be able to tell the difference between male and female sheep? Male Dall sheep, called rams, have large, iconic, circular curls and females, called ewes, have less curved, shorter horns, which are more slender. In the summer males and females are rarely seen together, with the exception of young immature rams that stay with mom. Sheep like to bed down on exposed edges in order to watch for predators. This population is one of the largest concentrations of Dall sheep in North America. It's estimated that the Dall sheep population is around 13,000! Wrangell-St. Elias was created in part to protect this precious population of Dall sheep living here.

Another wildlife spotting tip is to slow down and look *beyond* the tall bushes and trees along the roadside. Sometimes wildlife can be camouflaged very well in the shrubs. The black, brown, and grey hair on Moose and the shaggy brown, blond or black fur of bears blend in very well with the willow and alder branches. If you see a moose or bear disappear into the woods, stop at that location on the road and take a second to look for them. You might just see one, standing still, just barely camouflaged and hiding in plain sight. Bears can often be seen in the open in the fall, along streams and rivers where salmon are spawning. Both black and grizzly bears live in Wrangell-St. Elias, but you're more likely to spot black bears in the forested areas along the McCarthy Road. Black bears can be any color, not just black, so look for a few key features to help correctly identify them: a flat nose sloping to their forehead, large ears, no noticeable hump on their shoulders, and shorter, more curved claws. Bears are voracious eaters and will feed on almost anything. They are omnivores, meaning they will eat whatever is available. But they usually eat grasses, roots, berries, and insects. In Alaska, fish can be a large part of a bear's diet. Black bears, on average, usually weigh between 90 to 551 pounds. Size varies greatly by age, gender, health, and season. Keep wildlife wild! Remember to stay a safe distance from wildlife, even in your vehicle.

Of course, in Wrangell-St. Elias, one Alaskan icon may be easily seen along the road: moose of course! Have you seen one yet? If you spend any time on Alaskan roads, you'll have a good chance of seeing one of these giant, charismatic animals. Moose frequent roadsides and can be seen grazing on willows near water. Sometimes you'll even catch their lanky bodies coming up *out* of the water. What a sight! Moose are excellent swimmers and seek out sodium-rich aquatic plants at the bottom of lakes and ponds. Moose have specially adapted noses for diving too!

While you might hold your nose before jumping in a pool, a moose uses a fatty pad and strong facial muscles to close its nostrils preventing water from getting in. Moose are herbivores and will eat both terrestrial and aquatic plants. A typical moose might eat about 70 pounds of food per day! An average moose can weigh about 800 pounds! For males, or Bull Moose, part of that weight is his antlers. The record for the heaviest moose antlers was in Alaska, with a rack weighing in at 79 pounds! Can you imagine carrying around almost 80 pounds of weight on your head?! Many Moose are killed on roadsides in Alaska each year, so be careful driving!

(Music fades in and ends)

This concludes Track 7. At this time, go ahead and pause or stop this recording. Proceed to Track 8 when you reach mile 44 or are near the Lakina River Bridge.

Track 8: Lakina River area

(Music starts and fades out)

You're about to cross the Lakina River bridge. This river is primarily fed by the Lakina Glacier and other meltwater from that drainage. It's a smaller river than the Kuskulana or the Kennicott rivers, but its waters are still a powerful force. During the summer months, glaciers and their meltwater carry a variety of sediments down valley. Where you're crossing the Lakina River, you'll see large rocks, gravel and finer sediments in the streambed. You may notice a blueish hue to the water. This is due to the presence of fine sediments, called glacial flour or rock flour, produced by a grinding action up valley. When rocks held within a glacier meet up with mountainsides and bedrock, the friction causes the release of a very fine powder. This powder is so fine it stays suspended in the meltwater, rather than settling to the bottom. As the glacial flour swirls around in the rivers and streams, it reflects a beautiful light blue color in small quantities, and darker tan or gray when the silt is highly concentrated. When looking at Alaska's inland waters, this blue or whitish "glacial milk," or even the darker tans or grays, is a good indication that a glacier is upstream.

Glaciers are formed when winter snows accumulate year after year, are compressed into ice, and ultimately get heavy enough to flow. A glacier can move like a slow river of ice down a valley. Although glaciers move slowly, they have a lot of power to destroy anything in their path. Upstream from where you are now, the Lakina Glacier is working like a bulldozer to move large rocks down the mountain and dropping them to create moraines. A moraine is any accumulation of glacial debris, like soil and rock, occurring in an area that has been or is currently glaciated. The Wrangell and Chugach mountains you see around you were at one time heavily glaciated. Those glaciers carved these valleys thousands of years ago, and some are still here working to carve out mountain peaks, basins, and valleys. The glaciers in Wrangell-St. Elias cover more than 34% of the land area, or over 7,000 square miles of the park! The ice in Wrangell-St. Elias is larger than the size of the state of Connecticut! Glaciers are an unmatched powerful force on this landscape.

If you're looking for adventure, this is a great area for some backcountry exploration! It's a strenuous trip, but several guide services offer trips into the Lakina drainage from the Kennecott area. This requires a week long, wilderness hike, followed by a bush plane ride back to town. You can skip the plane and get an adrenaline rush by packrafting your way down the Lakina River to make a loop as well. This type of trip is only for experienced hikers and rafters, but if you're interested, ask a park ranger about details.

Later on when you're done touring the McCarthy Road, you'll find several glaciers in the Kennecott Valley carving out the valley, their moraines taking shape along and below the glaciers, and see the river that flows out of the valley. If you plan on staying in the Kennicott Valley, you'll have the opportunity to see these glaciers at work. Take a short walk down to the Toe of the Kennicott Glacier and take in the sights and sounds of the melting, cracking, and crumbling face of the glacier. Better yet, head up to the town of Kennecott to hike on the white ice of the Root Glacier. Chat with a park ranger for directions to these places. They are unforgettable experiences if you have enough time here in Wrangell-St. Elias!

(Music fades in and ends)

This concludes Track 8. At this time, go ahead and pause or stop this recording. Proceed to Track 9 when you reach Mile 45 or near the Long Lake area. This will be shortly after this track finishes.

Track 9: Long Lake area

(Music starts and fades out)

As you approach Long Lake, you'll notice there are several private land owners in the area. This spot was a traditional homesteading area during the mining years. Original residents first moved here in the early 1900's, when McCarthy and Kennecott were first established. These homesteads were once farms where grain was grown for draft animals and vegetables were harvested for the railroad workers and miners in Kennecott. Access to locally grown, fresh food during the summer season was important in such a remote location, since it took so long to get supplies and goods from the lower 48. The food served in the Kennecott bunkhouses was said to be "mostly good" and workers were happy to have the constant supply of goods brought by the railway.

(Music, Water running sounds)

Starting in late summer, Long Lake is a good place to look for spawning salmon coming from downstream. Take a peek in this stream from the road, but be aware that all of the land around this stream is private property. Each year an average of 18,000 sockeye salmon struggle up the silty Copper and Chitina Rivers to spawn in this lake! This is the largest known sockeye salmon population within the Chitina River drainage. It's a very unique run of salmon. They're unique because they begin entering the lake as early as August and spawning continues until April. This salmon population has the longest known annual spawning duration of any sockeye salmon population in North America. Most Alaskan sockeye salmon spawn in the late summer and fall, then die in the streambed shortly thereafter.

Just downstream from the outlet of the lake there is a weir, or a fence-like barrier used for counting fish, that has been in operation since 1974. Each year it keeps track of how many salmon swim into Long Lake and through the weir. This is the longest running data set of weir counts of salmon in the Copper River drainage. Initially the Alaska Department of Fish and Game ran it. In 1976 Cliff Collins, the local land owner, voluntarily took over the procedures when state funding was no longer available. Since 2002, Wrangell-St. Elias National Park & Preserve has operated this weir, with help from the Collins Family Trust, every summer. When

he homesteaded this area in the 1960's, Cliff Collins turned the historic railroad depot, from the mining era, into his home.

(Sounds: Loons calling, lake sounds)

You may wonder how a private landowner can have property inside the National Park. Perhaps you saw a bunch of signs along the road stating: "Entering Wrangell-St. Elias..." "Leaving Wrangell-St. Elias..." How confusing?! These signs are land ownership changes *and* clarification between national *park* and national *preserve*. After you crossed the Copper River in Chitina, you've been within the park boundary and haven't left it. There are several places along the road where private or state land exists side by side with the National Park and Preserve lands. These are called "inholdings," or privately owned lands that are inside the boundary of a national park, preserve, forest, state park, or similar publicly owned, protected areas. Wrangell-St. Elias National Park & Preserve was created in 1980 through the passage of ANILCA or the Alaska National Interest Lands Conservation Act, which acknowledged the presence of these inholdings and made provisions for continued access to them. That's why you'll sometimes see private homes within the park.

In recognition of the unique nature of Alaskan parks and some of the traditional activities that had occurred in the area for many years, ANILCA also provided for two different types of management of the land. You probably saw signs saying: "National Preserve" pointing one direction, or "National Park" to another direction. These signs distinguish between the two types of management: park and preserve. There are a few differences between the two, but the main difference is that sport hunting and fishing is allowed in the National Preserve. In the National Park land, only local residents can hunt, which is different from other National Parks in the lower 48. These allowances were written into the legislation when Wrangell-St. Elias was created. This kept with the historical uses and allows residents to continue to live off the land in a true Alaskan spirit.

(music)

Soon you'll be approaching the end of the McCarthy road and the west side of the community of McCarthy. McCarthy was homesteaded in 1906 at the beginning of the copper mining boom; founded and named by John Barrett. Barrett named the town after his friend, a prospector named James McCarthy. Tragically, James McCarthy had recently drowned in the Tonsina River after being thrown from his horse. The town was initially developed as an outpost and supply stop for those making their way to the Shushanna gold fields, but found its true purpose in supporting Kennecott, 5 miles up the hill. The town of McCarthy provided a place of release for weary workers, a place to grab a drink, gamble, and perhaps spend an evening with one of the professional women on the row. As one might imagine, the generally lawless community of McCarthy posed a stark contrast to the rules and regulations of the strict Kennecott company town, where alcohol was forbidden and only employees were allowed in the camp. Today that contrast can still be felt, as McCarthy is known as a rugged, frontier bush community, while Kennecott has become an important National Historic Landmark and is known for its quiet atmosphere.

(Music fades in and ends)

This concludes Track 9. At this time, go ahead and pause or stop this recording. Proceed to Track 10 when you reach Mile 56 or the end of the road.

Estimated time: 6:11

Track 10: End of the road

(Music starts and fades out)

You're almost to the end of the road, and to the beginning of an even greater adventure! When you arrive in McCarthy, on your left, you'll see the McCarthy Road Information Station, maintained by the National Park Service. This wayside area has free day-use parking, vault toilets, interpretive kiosks, information on shuttles and services, & the West Glacier hiking trailhead. No camping is allowed in this area. The Information Station is not typically staffed, but is a great place to gather information and get your bearings. If you choose to park at the McCarthy Road Information Station for the day, it's a one mile walk down to the Kennicott River footbridge. You may also park overnight in marked private parking areas, further down the road. You'll need to park your vehicle, as there is no public access with a vehicle beyond the footbridge. Then you'll proceed over the footbridge to access the town of McCarthy and Kennecott. Once across the footbridge, you can purchase a shuttle ride to McCarthy, another mile away, and/or to Kennecott mill town, about 5 miles away. You may also choose to walk or bike this distance. If you're on foot, you have two options. You can walk the road, which can be dusty at times. Or choose the historic Wagon Road, which parallels the main road with a bit more shade. To access the Wagon Road, follow the main road about 1.5 miles towards Kennecott. On your right will be a red community building labelled "Tony Zak." Across the road on your left is a shed. Shortly after, there's an old road bed where the trail leads into the forest towards Kennecott. The trail will narrow as you head uphill to Kennecott. This trek offers periodic views of the valley, wildflowers, and the historic Kennecott Cemetery. Be on the lookout for bears, lynx, weasels, and squirrels. It's essential you make noise while hiking anywhere in this valley, in order to alert bears to your presence and avoid a negative interaction. If you decide to camp in the valley, you must store your food properly: in a bear resistant canister or in designated bear boxes. You can check out bear cans from the National Park Service free of charge. Ask a ranger for more details! Regardless of what you choose to do in McCarthy or Kennecott, we hope you enjoy your time in these historic frontier towns.

When you reach the end of the road, you'll have to park your car before proceeding across the Kennicott River footbridge. The state of Alaska maintains the footbridge and it's against state law to drive any vehicle across—it's for foot traffic only. The last vehicle bridge washed out in 1975. From that time until the mid-1990's a hand tram & cable was used to cross the turbulent Kennicott River. A daunting task if you're carrying all your gear or supplies! You can still see the cable crossing the river today. If you visit the McCarthy-Kennicott Museum, across the footbridge and just down the road, you can see the metal trams which took people across the river. The museum has lots of other interesting exhibits and neat historic artifacts inside, so check it out!

In McCarthy you'll find an array of services such as lodging, food, and guide companies. Throughout the summer McCarthy hosts educational workshops, live music, dancing, trivia nights and weekly softball games. You can grab a shuttle ride to Kennecott from the footbridge or in downtown McCarthy. This shuttle takes you up to Kennecott to view the once bustling copper mining town. In Kennecott you'll also find lodging, food, and guide companies. Be sure to visit the National Park Service Information Station in the historic mill town, where park rangers

are ready to help you plan trips, check out bear canisters, provide maps, and answer any questions you may have.

Kennecott truly is in the heart of Wrangell-St. Elias National Park and Preserve and offers breathtaking views of glaciers, mountains, and rivers. Up valley to the north and east you'll see the Stairway Icefall. This feature, which is a part of the Root Glacier, comes down from Mount Regal at a steep pitch, causing the ice to crack and fissure. As it reaches the valley, the Root Glacier becomes less rugged and provides excellent access for hiking and ice climbing. You can hike out to the Root Glacier via a relatively easy trail starting from the Kennecott mill town. One of the most striking features seen from the historic site is the Kennicott Glacier, which is covered with moraine rocks, and starts up valley almost 28 miles to the north at Mount Blackburn. The towering 16,390-foot peak is the highest in the Wrangell Mountains and the fifth highest in the United States. Mount Blackburn is an inactive shield volcano and is the second highest *volcano* in the US. Today, the Wrangell Mountains are a volcanic mountain range, but they have a much longer tectonic history that includes millions of years of uplift, then erosion.

The terminus, or lowest portion, of the Kennicott Glacier is covered in debris that makes it look from a distance like large piles of rock. The icy glacier is actually under all of that rock, which is typically only a foot or two thick. The glacier melts and combines with nearby streams to create the Kennicott River. This river flows down to the Nizina River, into the Chitina, and eventually into the Copper River, where you started your journey today. We hope you've enjoyed the trip and are excited to get out and see more of Wrangell-St. Elias National Park & Preserve.

(Music fades in and ends)

This concludes the McCarthy Road Audio Tour. Thank you for joining us on this journey. Be sure to find a park ranger if you have any questions.

Enjoy YOUR Park!

Estimated time: 3:06